



Mill at Nickel Plate has been expanded to process up to 4,000 tons of ore per day.



Mine geology department is responsible for grade control and exploration in the mine area.

### Nickel Plate Mine

Corona's wholly-owned Nickel Plate mine lies near Hedley, British Columbia, 150 miles east of Vancouver. The property was operated as an underground mine before 1930 and between 1934 and 1955. Production from three open pits was initiated by one of Corona's predecessor companies in April 1987.

In 1989 Nickel Plate produced approximately 79,500 ounces of gold and 102,000 ounces of silver, less than planned and at higher cost. As noted in the 1988 annual report, once mining and milling operations were under way at Nickel Plate, it became apparent in the summer of 1988 that the average grade of ore being mined was lower than the grade projected in the original feasibility study. Internal and external reviews were carried out and resulted in a considerable reduction in both tonnage and grade of reserves. Lower gold prices in the first part of 1989 exacerbated the problem.

Among the steps taken to increase efficiency at the mine were the installation of a larger crusher, modification of the mill circuit and the purchase of larger mining equipment. The Nickel Plate mill had an initial design capacity of 2,700 tons per day and this has been increased to 4,000 tons per day. During 1989 the mill averaged 3,216 tons per day.

As a result of these and other efforts, operating costs have been reduced quite considerably and a small direct operating profit was achieved in 1989. While the operation remains a high cost producer the ongoing efforts of the 175 minesite personnel to reduce costs are to be commended. A forward selling program of all of Nickel Plate's 1989 production at prices exceeding US\$450 per ounce also proved timely.

An intensive exploration campaign in the vicinity of Nickel Plate has not to date established any significant additional mineable reserves.

	Twelve months ended Dec. 31, 1989	Twelve months ended Dec. 31, 1988	Nine months* ended Dec. 31, 1987
<b>Production</b>			
<b>Nickel Plate mine</b>			
Tons milled	1,173,990	969,643	530,712
Tons/calendar day	3,216	2,657	2,140
Gold grade (oz/ton)	0.081	0.108	0.118
Recovery (%)	84	84	78
<b>Production</b>			
Gold (oz)	79,492	87,286	48,625
Silver (oz)	102,118	95,028	26,762
<b>Direct operating costs</b>			
per ounce gold (Cdn)	\$485	\$457	\$487
per ounce gold (US)	\$410	\$377	\$373

\*Mine poured its first gold in April 1987. Commercial production began January 1, 1988.

### Environmental activities

- The tailings impoundment area at the Nickel Plate mine has been expanded. Concentrations of cyanide, used to dissolve gold out of the host rock, have been considerably reduced within the zero discharge tailings pond. Additional hydrogeological studies are also in progress.

Proven and probable reserves	Tons	Gold oz/ton
<b>Nickel Plate mine</b>		
At January 1, 1990*	1,575,000	0.076
At January 1, 1989	5,644,500	0.087

\*An additional 6.6 million tons grading 0.075 ounces of gold per ton may be mined depending on economic conditions.